

A2. HISTORICAL BACKGROUND

This historical background consists of two parts. The first part covers CONSER's initial 12 years (1973-1985) when it was formally called the "CONSER (Conversion of Serials) Project." This subsection is an excerpt from *The CONSER Project--Recommendations for the Future*, prepared by Jeffrey Heynen and Julia C. Blixrud, and published in 1986 by the Library of Congress as *Network Planning Paper*, no. 14. The evolution of CONSER to program status in 1986 and the following years are summarized in part two of this section, *History of the CONSER Program, 1986-1993*, prepared by Bill Anderson, CONSER Specialist at the Library of Congress.

A2.1. HISTORY OF THE CONSER PROJECT

As a concept, CONSER is over twelve [twenty in 1995] years old. It was first conceived in an Ad Hoc Discussion Group on Serials Data Bases. Also known as the "Toronto Group" and sometimes as the "Anable Group," this body first met informally during the American Library Association's annual conference in June 1973. Richard Anable, convener of the group, had an interest in the issue of machine-readable serials files because he was then investigating the problems associated with them for the National Library of Canada and York University.

Although the group recognized many reasons for establishing a comprehensive North American database of serials titles, one of its primary concerns was the inadequacy of projects for producing union lists of serials.

The group also recognized that: (a) the national libraries, other libraries, and the International Serials Data System (ISDS) were not building a serials database fast enough to satisfy the needs of developing library cataloging systems, and; (b) the database work that was being performed was to some degree duplicative and therefore wasteful. In addition, it recognized the existence of three major barriers preventing both the elimination of duplicated efforts and the rapid building of a comprehensive database:

1. The lack of communication among the generators of machine-readable serials files.
2. The incompatibility of format and/or bibliographic data among existing files.
3. The apparent confusion about the existing and proposed bibliographic description and format "standards."

Participants in the group noted that various committees within the American Library Association (ALA) were concerned with some aspects of these problems, but no one ALA committee or other body was addressing their full scope. They also noted that the creation of a comprehensive database would require the cooperative effort of a number of libraries and the ISDS National Centers in the United States and Canada. For these reasons, they agreed that an attempt should be made to address the problems and to find means for building a cooperative database. The chief use of this database was to be the support of union-list-of-serials activities.

Mr. Anable, Cynthia Pugsley (now Durance) from the University of Waterloo Libraries, and Jay Cunningham from the University-wide Library Automation Program at the University of California, subsequently prepared a position paper outlining the need for such a group on a continuing basis.

After distribution of both the position paper and the minutes of the June 1973 meeting, the Council on Library Resources (CLR) was contacted and agreed to fund a meeting of a steering committee composed of representatives from interested libraries and library organizations.

The committee included representatives from CLR, the Library of Congress (LC), the National Serials Data Program (the United States ISDS agency, located at LC and known as NSDP), the National Library of Canada (NLC), ISDS/Canada (located at NLC), the Ohio College Library Center (as OCLC was then known), the Joint Committee on the Union List of Serials (JCULS), the Canadian Union Catalogue Taskgroup and its Subgroup on the Serials Union List, the Association of Research Libraries (ARL), the University of California University-wide Library Automation Program (ULAP), the State University of New York (SUNY), Northwestern University, University Laval, and an observer from the British Library.

The meeting was held on September 21, 1973 at York University in Toronto. Its purposes were as follows:

1. To establish a mechanism for creating a set of agreed-upon practices for converting and communicating machine-readable serials data.
2. To establish a mechanism for cooperatively converting a comprehensive retrospective bibliographic database of serials.¹

To further these ends, four subcommittees were established: Holding Statement Notation; Working Communications Conventions; Authority Files, and; Cooperative Conversion Mechanism. During the fall of 1973, the subcommittees met to work on their assigned topics.

An important question addressed by the Steering Committee was that of the organizational structure. The group had no legal status and needed some sort of formal affiliation. After considerable discussion with the Library of Congress, the National Library of Canada, and the Association of Research Libraries, the Council of Library Resources was approached and agreed to fund the effort partially.

In addition to their primary, file-building objective, the Steering Committee identified three secondary objectives:

1. To assist the national libraries of both countries (Canada and the United States) in the establishment of a computer-maintained (and hopefully remotely accessible) serials data system. This would be accomplished partly by the very existence of the resulting database, and partly by the experience gained in its establishment.
2. To assist in the definition of the roles of the regional or resource centers in such enterprises.
3. To provide a source database for use within the International Serials Data System, and to seek the active participation of the Canadian and United States ISDS National Centers.

The project did not intend to establish any new standards or cataloging policies. Its leaders planned to create a database that could accommodate past, present, and future standards for format, description, and identification. However, the group recognized the need to reconcile conflicts among existing standards and policies such as the Library of Congress MARC-Serials format, the National Serials Data Program internal format, the International Serials Data System Guidelines, and the draft of the Canadian MARC serials format.

Lawrence Livingston examined the proposition that the best resolution of format and rules conflicts would be the complete recataloging of all serials titles, consistently using one set of rules, and adding all necessary data elements at the point of record creation. He pointed out, however, that this approach was only theoretically possible. None of the participating institutions would have the resources to completely recatalog all of their titles. Even if they could recatalog at the point of entry into the CONSER database, with the formats and rules changing the way they then were, records would require further change almost as soon as they were created.

Mr. Livingston referred to the record-consistency problem as a chicken-and-egg situation:

"a project like CONSER cannot succeed without a high degree of consistency and standardization in serials cataloging in many libraries, but something very much like CONSER is required before that degree of consistency and standardization can be attained."²

Project planners examined this dilemma. They saw two options for entering records. A participant would either enter completely consistent records (fully upgraded and verified prior to entry) or enter records first and upgrade them over time as resources permitted. After considerable discussion in which the Library of Congress took a very active role, they decided on the main goal of the project as it had by then evolved. As summarized by the ARL Board of Directors at its meeting on October 5, 1973, this goal was to create "a large, machine-readable serials database, of as high a quality as possible within a reasonably short time, in order to satisfy the burgeoning need by many libraries."³

The consequence of this decision was the need for the most flexible system that could be devised. "This," stated Mr. Livingston, "is exactly what CONSER is all about."⁴

Acting upon the decision, project designers recommended creation and adoption of uniform guidelines for record creation and input linked to a prerequisite that all participants agree to abide by them. The guidelines and prerequisite immediately became known as the "agreed-upon practices."

Responsibility for establishing format consistency was given to a Subcommittee on Working Communications Conventions, chaired by James E. Rush. This group came up with a minimum set of data elements to define the least-acceptable CONSER record. Participants would be encouraged to create records that were as complete as possible.

Questions about the bibliographic conventions to be observed (as opposed to the format to be used) also needed to be resolved. The Steering Committee decided that Anglo-American Cataloging Rules as revised were preferred. It was recognized, however, that the rules had been in existence only since 1967 and they had not been adopted by all of the North American library community. Major issues discussed included superimposition and latest-title cataloging.

The file-building effort was planned to be two-fold: batch-loading of existing machinereadable records and online entry of records not yet in machine-readable form. The Cooperative Conversion Subcommittee recommended the OCLC system as a "temporary solution" for creating the database because it would permit both batch-loading and online cataloging and would also accommodate the division of labor by taking advantage of serials catalogers across the continent.⁵

The subcommittee envisioned a project that would produce approximately 200,000 records lasting two years with possible extension to a third. It anticipated participation of no more than fifteen libraries beginning with no fewer than four OCLC members.

Existing files would first be batch-loaded into OCLC. In cataloging, each participant would access a record from the base file. If a match was found and there was no other information to add or change, only the participant's library identifier, or holding symbol, would be added. Modifications or additions to existing records would be made when necessary. When no record existed in the file, the participant would be responsible for creating one. Since all participants would work from their existing catalogs, agreed-upon standards for input would be needed.

The participants would divide the alphabet among themselves. Each participant would agree to work first on currently-received serials. Upon completion of that part of the process, they would go through the rest of the alphabet and enter or "convert" remaining live titles. Finally, resources permitting, they would return to their assigned portion of the alphabet and begin to add their ceased publications.

A post-edit capability would be developed. The Library of Congress and the National Library of

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Canada agreed to become Centers of Responsibility to verify certain data elements in each record. They would validate records according to AACR and the ISDS Guidelines. (In addition, the ISSNs and key titles would be verified by the National Serials Data Program and ISDS/Canada.) This verification process was referred to as authentication.

During the establishment of priorities for the project, the Steering Committee decided not to wait for the completion of work from the authority file and holdings statement committees before beginning. Instead, the Steering Committee agreed that the bibliographic file-building effort should not be held up pending the availability of an authority file, but that a machine-readable authority file would be a major requirement for the future. Since two Centers of Responsibility (LC and NLC) were already being planned, it was acknowledged that the authority work would be included as a part of their authentication procedures. The level of holdings information needed at the national level was also questioned and, for reasons of practicality, the location symbol of the holding library was determined

to be adequate. It was expected that both the authority and holdings committees would continue their work after the project got underway.

When CONSER began, the OCLC database contained relatively few serial records. After examining several large machine-readable serial databases, CLR provided a copy of the Minnesota Union List of Serials (MULS) to OCLC for batch-loading into its database. Along with the Library of Congress and National Library of Canada retrospective serial records, MULS would serve as the base file for the project. Records were loaded during the winter of 1976. Later, records from the Pittsburgh Regional Library Consortium and the Florida Union List of Serials were also contributed to the OCLC system.

The initial group of participating institutions was composed of the Library of Congress and the National Serials Data Program within LC, the National Library of Canada and ISDS/Canada, the National Library of Medicine, the National Agricultural Library, the University-wide Library Automation Program (ULAP) of the University of California, the Minnesota Union List of Serials (MINITEX at the University of Minnesota), the State University of New York and the New York State Library (jointly), Cornell University, and Yale University.

Participants received LC training in 1975 and began online work in the spring of 1976. Bibliographic records for titles were claimed or created, modifications were made online when possible, and surrogates (photocopies of parts of publications to support the bibliographic description) were sent to the appropriate Centers of Responsibility to support authentication work.

CONSER I was the term used to describe this first phase of the project. The bibliographic file-building effort was planned to last through November 1977. As stated, project planners considered the use of OCLC an interim solution to the problem of finding a location for the database. They recognized OCLC's advantages, including a proven capability to produce workable network software and support and an existing cataloging network. Nonetheless, they preferred national-level management and operation. They believed that the project should, as soon as practical, be taken over by a national institution, preferably the Library of Congress.

The Library of Congress initially agreed to assume this role. The transfer of management and operational responsibility to LC was to begin the second phase of CONSER. This beginning of CONSER II was to occur in 1977.

In October 1975, with the support of a grant from the Council on Library Resources, LC began an in-depth analysis of the software and additional hardware requirements for this second phase. Upon completion of the analysis, it was expected that design specifications would be written and actual programming would begin.

The study team for CONSER II decided to develop long-term objectives for LC serials processing so that the functions implemented could be integrated into any future systems. Those long-term objectives included initial plans for LC serials automation and for the design of a National Bibliographic Service. LC had been providing national bibliographic services for most of the century and, in 1969, had added machine-readable products to its list of services. CONSER II was to be the serials component of the LC system.

According to an article by Henriette Avram of LC and Richard Anable, then of CLR, the intended purpose of CONSER II was to improve user success in obtaining desired information from serially published materials.⁶ The goals of the system would be to:

1. Improve the bibliographic control of serials across institutions.
2. Promote the use of unique identifiers (key title and International Standard Serial Number) by libraries and other secondary information services such as abstracting and indexing services

and publishers.

3. Improve the accumulation of and the access to locations information for more effective interlibrary loan and resource sharing.

CONSER I experience in the use of the OCLC system was valuable in determining the elements needed for the proposed CONSER II system. Many of the concepts developed under CONSER I would be carried over. The system would operate in an online mode with decentralized input and centralized authentication. LC and other designated institutions would review and authenticate data and the National Library of Canada would be asked to continue in its role as an authentication center for Canadian imprints.

The system would employ a "locking facility" allowing modification of specified fields only by authorized agencies. The system's searching facility would be an expansion of the existing LC system. Authority control was included in the long-range plan for the serials system (as well as for other forms of materials). Work begun on a standard for computer-to-computer linkage for exchange of bibliographic record would be monitored. It was anticipated that standards for linkages would not be in place by the time CONSER II was implemented, but the planners intended to provide computer-to-terminal (and vice versa) communications to CONSER II participants.

CONSER II would provide a measure of internal control for LC's serial processing activities. It was to have the capability to build the bibliographic record as the physical piece moved through LC's assembly-line cataloging operation. The ISSN and key title would be added to the bibliographic records by the National Serials Data Program. Printed catalog cards would be provided upon the completion of the design of the International Standard Bibliographic Description for Serials (ISBD(S)). The published *New Serial Titles* would provide the means for disseminating LC serials cataloging information, CONSER data, and ISSN and key titles in book catalog form. Records would also be distributed in machine-readable form.

CONSER II planners saw an opportunity to expand the system to include organizations that were not necessarily university libraries and named the following in their list of potential participants: U.S. national and federal libraries, the U.S. Government Printing Office (GPO), the National Federation of Abstracting and Indexing Services (NFAIS), and subscription agencies. Each of these organizations was a link in the serials information chain.

Ms. Avram and Mr. Anable include discussions of the importance of each of these groups in their article. They recognized that the U.S. national libraries and GPO have special significance in that they collect and catalog large numbers of materials in specific subject areas.

The need for participation of the abstracting and indexing (A&I) services was recognized, but their involvement had been hindered by the absence of standards for identifying serials publications. With the establishment of the International Serials Data System, this handicap was expected to decrease. The major functions of the ISDS were to register serials on an international basis and provide a standardized description and assignment of unique identifiers for each serial; i.e., the ISSN and key title. The CONSER commitment to incorporate that data into the bibliographic records would provide an opportunity to increase cooperation between the A&I and library communities.

Subscription agencies were developing automated systems as well during this period and were seen as the best sources of serial frequency, supplier, and price information. Including them in CONSER II would also encourage wider use of unique identifiers for serials. Selected institutions would have the ability to authenticate specific data elements and each of the external participants in CONSER II would be provided some method of access to the database.

CONSER II planners also expected to provide means for allowing regional union list agencies to input

and maintain their holdings files on the LC system. Full investigation and possible development of this function was to be dependent on the standardization of holdings statements. Also included in the planning for CONSER II was an investigation of the international activities in which the new system might play an important role.

In addition to the distribution of bibliographic records in traditional card, book, and machine-readable forms, LC investigated the possibility of providing other products from the CONSER system. Some of these included: periodic reports of all new records added to the database, periodic dissemination of the complete CONSER II database either in traditional catalog form or in a register form with indexes, and periodic reports providing location and holdings information.

Fiscal constraints prevented LC from expanding its automation efforts to support CONSER II. Late in 1977, OCLC agreed to accept the managerial responsibility that had previously been CLR's and to continue its operational responsibility for the project. Although CLR had negotiated a contract with OCLC for CONSER I database operations, no new agreement was established when OCLC took over CLR's management role. In effect, OCLC and other CONSER principals continued to observe the terms of the contract even though it was no longer in force.

No formal agreement had previously been established for dividing decision-making authority among OCLC, the Centers of Responsibility, the ISDS National Centers, CONSER Participants, and other interested groups. This informal process did not cause friction nor inhibit the project's growth. After the managerial change-over, the division of responsibility remained implicit.

There were two committees of participants: an Operational Staff Group, composed--as the name suggests--of persons in each participant library who carried out day-to-day operations, and a Participants Group, composed of representatives having managerial responsibility in each participating library. There was also an Advisory Group, composed of representatives from major organizations that were perceived to have a stake in CONSER.

Of the three groups, the Participants Group held primary managerial authority. In a memorandum of October 16, 1980, Frederick G. Kilgour, then OCLC President, discussed the "governance" section of an ARL report on the project. The report raised the concern implicit in the Steering Committee's decision that OCLC should be an "interim" operator of the database, stating that managerial responsibility for the database should not rest with any one utility. In response, Mr. Kilgour asserted that responsibility rested not solely with OCLC but also with the CONSER Participants (including LC and NLC). He said OCLC served primarily as a facilitator and a manager, and not as the primary decision maker within the project.⁷

In July 1978, at its first meeting subsequent to the management change-over, Mr. Kilgour gave the Participants Group further information on his view of the group's role and that of OCLC. The participants would have responsibility for day-to-day cataloging decisions. OCLC's role would include such functions as calling meetings of the Participants and Advisory Groups, acting as communications center for the project, and providing statistical and management reports.

Although OCLC thus provided some clarification on its view of matters of governance, at the time of OCLC managerial change-over these matters were for the most part undocumented. It appeared that the Centers of Responsibility, LC and NLC, retained final responsibility for database operations. NLC, LC, and OCLC shared responsibility for establishing general policies and procedures and were advised in this area by the Participants Group. The Participants Group made routine cataloging decisions. The Operational Staff Group acted on a procedural--as opposed to a policy--level, and acted largely as a discussion group having as its main function the sharing of information, problems, and tactics for problem solving.

The purpose of the Advisory Group remained unclear. At its first meeting following the transition, the Participants Group discussed this matter and reached no agreement. The participants decided nonetheless that, whatever its purpose, the Advisory Group should continue to exist. In a brochure describing CONSER, OCLC later stated that the group existed to counsel CONSER participants on policy matters, review the progress of the Project, and inform constituents about the Project.⁸

Along with the National Library of Canada and the ISDS National Centers, the Library of Congress would continue to be responsible for the bibliographic quality of the database. Adherence to working conventions would continue to be a requirement for all participants; any changes to those conventions would be developed by the Library of Congress in consultation with CONSER Participants and OCLC.

At this first post-transition meeting the Participants Group formally agreed that the work of CONSER had not been completed and that the project should continue indefinitely.

Also at this meeting, a subcommittee was appointed to draft a goals and objectives statement for the project. Appointed to the subcommittee were Mary Sauer (now Mary S. Price) of LC, Mary Ellen Jacob of OCLC, Ryburn Ross of Cornell, and Mr. Anable.

In May 1979, this statement was presented to the Advisory Group. It contained a single goal and six objectives:

Goal: To continue to enlarge and improve a core database of bibliographic information on serial titles available for use on the international, national, regional, and local levels.

Objectives:

1. To provide a reliable and authoritative serials database to meet the needs of library patrons, other users of information, and the developing national and international bibliographic networks.
2. To assist the national libraries of both Canada and the United States in the establishment and maintenance of a machine-readable serials database.
3. To support the interface of national serials database activities with the programs of international serials systems--including the participation of the National Serials Data Program (NSDP) and ISDS/Canada in the International Serials Data System (ISDS).
4. To support local, regional, national, and international serial union list activities.
5. To ensure the use of nationally and internationally accepted standards, rules, and conventions for building and maintaining serials bibliographic records.
6. To identify deficiencies in the database, such as subject, language, and retrospective coverage, and to implement appropriate remedies.

By June 1979, five new participants had joined CONSER: The Florida Union List for Serials (University of Florida), Boston Theological Institute, Harvard University, the U.S. Department of the Interior, and Indiana University. During the following year, five more joined: The Universities of Washington, Texas, Michigan, and California-Los Angeles, as well as the Government Printing Office. In August 1980 ULAP (California) withdrew from membership, and in 1983 the University of Pittsburgh joined, completing CONSER's current membership.

By April 1980, the CONSER database contained 250,000 titles, including 90,000 authenticated by either LC or NLC.

In 1980, the ARL Task Force on Bibliographic Control conducted a review of CONSER, identifying four areas in which there were issues to be resolved and giving recommendations regarding them.⁹ These were:

Issue: The CONSER database is not accessible online to all libraries.

Recommendation: Endorse a resolution adopted by the Technical Services Directors of Large Research Libraries at their meeting on June 27, 1980, and support efforts at interim solutions for sharing data. The Technical Services Directors of Large Research Libraries is a discussion group within ALA's Resources and Technical Services Division. The group's resolution encouraged libraries and the bibliographic utilities to work toward establishment of: (a) an electronic interconnection between the utilities; (b) more timely distribution of CONSER records, and; (c) establishment of a carefully monitored quality assurance program.

Issue: Projects for retrospective conversion of records for serials are not all following the same standards.

Recommendation: CONSER standards should be adopted for all retrospective conversion

projects.

Issue: Managerial responsibility for a project, such as CONSER, which is North American in scope, should not rest with any one bibliographic utility.

Recommendation: None. (Note: the Kilgour memorandum of October 16, 1980, addressed this concern.)

The second half of CONSER's first decade can be characterized by the increased use of the database for other projects. The decisions to make CONSER the database of choice for these projects are a mark of achievement and a measure of success for the CONSER effort as well as a commitment for it to continue.

A major cooperative effort was begun in 1978 between the United States Postal Service (USPS) and the National Serials Data Program (NSDP) to implement mandatory printing of the ISSN on serials mailed at special rates through the United States mail. NSDP successfully persuaded the USPS to use the ISSN (if assigned) for serials mailed at second-class or controlled circulation rates as its authorized identification number for revenue collection and address correction purposes. For those serials without an ISSN, a USPS number would be required.

CONSER helped the USPS/NSDP project in two ways. First, the CONSER database is the comprehensive, reliable source for NSDP's ISSN registrations. Initial matching of the NSDP and USPS files was impossible since there was no element common to both files. To solve this dilemma, the USPS numbers were entered in a local control field of CONSER database records authenticated by NSDP that contained the ISSN to be reported to USPS. At the end of the project, the USPS received a magnetic tape of the database records with ISSN and USPS numbers to machine-load into its internal files.

Second, NSDP asked CONSER Participants for assistance on the project to help build the file on CONSER. A grant from the Council on Library Resources allowed the Library of Congress to contract with three of the CONSER Participants to aid NSDP in the project. Their role was to add records and/or the USPS field to existing records and to send letters to publishers to obtain surrogates for NSDP to assign the ISSN for those titles.

In 1981, *New Serial Titles* (NST) began to be produced from the MARC-Serials file. Holdings locations information was added to the 850 field in CONSER records by NST staff as reports were received from its participating libraries. Later, CONSER NST Participants began to report their holdings online. The nature of the publications changed as fuller records were included and only the institution location information could be provided. The size of the publication increased dramatically as MARC-Serials records were re-distributed. Measures were introduced in 1983 to use a subfield code in the 012 tag for NST to specify the date of inclusion of a report in its publications to help control the size and production of the NST volumes.

Also in the early 1980's, the Library of Congress investigated minimal serials cataloging for some of its materials. In keeping with LC's efforts to distribute its cataloging information, LC determined that the best means to make the minimal serials cataloging information available would be to use the CONSER database and send the records through the MARC-Serials distribution process. Although concern was expressed by CONSER and OCLC Participants about the possible problems the minimal level serials could cause in the database, it was generally agreed that until the work began it would be difficult to measure the impact.

OCLC made use of the CONSER database to support its serials subsystems functions. Most importantly, the OCLC Union Listing component became available in November 1980 and increased use was made of CONSER bibliographic records as a result of the numerous union list groups that

developed across the country. Also, as holdings were added and records were converted for each union list member, quality control questions and bibliographic inconsistencies were brought to the attention of the CONSER Participants by OCLC's quality control section staff. The union list projects acted to increase the bibliographic consistency of the database, especially when printed products began to be derived from it. An original CONSER objective was to support union list creation and the use of the database by OCLC and its participating libraries is a demonstration that the objective has been achieved to some degree.

Newspapers also became an important part of the CONSER database in the 1980's. The National Endowment for the Humanities began funding a program to enable states and territories to inventory and achieve bibliographic control for their newspaper holdings. The purpose of the program was to facilitate the sharing of a national resource--the newspaper. The U.S. Newspaper Program Participants were designated partial CONSER Participants and began to catalog and input records in 1983. Holding location information is included in the OCLC Union List subsystem. The bibliographic records are included in the CONSER database and are distributed by the Library of Congress through the MARC-Serials tapes. The goal is to inventory and catalog 300,000 newspaper titles published in North America since 1690.

The CONSER Abstracting and Indexing (A&I) Coverage Project began operation in 1983. The purpose of this project was to add title coverage information to records in the CONSER database to identify where serials were indexed and abstracted. The project was jointly sponsored by the Association of Research Libraries and the National Federation of Abstracting and Information Services. This project would provide a needed link between A&I service citations and library catalogs. Eighty-five A&I services agreed to participate in the project and provided lists of their title coverage information to the project. These lists were searched against records in the

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CONSER/OCLC database and a 510 field specifying the index name was added to matching serial titles.

Benefits from the CONSER A&I Project were expected for many groups (e.g., researchers, reference librarians, A&I services), but there has been significant benefit to CONSER from the project as well. Since abstracting and indexing services cover the more important serial publications, the re-assessment and review of all of these titles has taken place as the project staff checked to see that the titles have ISSN and key titles assigned to them (a project objective). Both the ISDS/Canada and NSDP have had an opportunity to review ISDS assignments for their imprints.

Project records will be authenticated and distributed through MARC-Serials. Many of the A&I covered titles were part of the base file and some of the records had not yet been authenticated due to the backlog at the Library of Congress. The project provided a means to move these records into a higher priority for authentication.

The A&I Project also identified titles not yet in the CONSER database. The number was relatively small and confirms the success of CONSER's cooperative database building effort. However, the identified titles are also in specific subject areas (e.g., art, architecture, and business), pointing to possible gaps in the database that need to be examined.

Another A&I Project benefit to CONSER is the developing maintenance program for the A&I services to continue to provide title coverage information to NSDP and the National Library of Canada. Since A&I services try to keep current with the titles they cover, they will be providing information to CONSER about new publications and title changes.

In addition to these special projects based on the CONSER database, major operational changes were made during the 1980's.

The Library of Congress introduced NACO, the Name Authority Cooperative, and some CONSER Participants were among the first members. The creation of the associated authority records for serials bibliographic records was of concern to the early CONSER Steering Committee. They wisely decided at that time to go ahead with CONSER without waiting for name authorities and to use the Centers of Responsibility review process as a means to ensure that the name authority work was completed. NACO developed as a result of some of the early Steering Committee work. In the 1980's, there was an increase in NACO review for serials to the Serial Record Division at the Library of Congress.

Upon authentication by a Center of Responsibility, the CONSER record would be locked against further modifications. Changes to records required the use of paper forms and associated documentation. The dynamic nature of serial publications and the number of changes necessary to the bibliographic file made the paper report forms unwieldy and barred CONSER Participants from making record modifications quickly. The seeming lack of responsiveness to changes was criticized by OCLC users and in some critical articles about the quality of records in the database.

The only solution was to unlock the records and rely on a practice of "responsible parties" (a phrase used during the Operational Staff Meeting, September 1982, and recorded in minutes), whereby CONSER Participants can make modifications to any fields that are not considered authoritative. Examples of authoritative fields are those fields that are control fields for a specific purpose (e.g., 010, LC card number or 022, ISSN). NSDP records were the first to be unlocked.

With some of the participants supplying authority records for NACO and the process for unlocking records completed, the way was paved for self-authentication. Since the backlog of surrogates and records awaiting authentication at the Library of Congress was large, the decision was made to pursue self-authentication as a means to move records more quickly through the data certification as well as

distribution process. Detailed procedures were developed by LC and self-authenticating participants would have their records monitored by LC. Some participants became self-authenticating in 1984.

The Library of Congress committed itself to preparing a new Editing Guide to document the various changes that had occurred since the publication of the *MARC Serials Editing Guide, Second CONSER Edition*. CONSER Participants, especially at the Operational Staff Level, expressed a need for good quality, comprehensive documentation and LC, as the institution with major responsibility for bibliographic quality made the commitment to provide it. Work has been on-going and a new Editing Guide is currently expected to be completed in 1986. [Ed. note: The base text was issued Apr. 1986]

In September 1983, OCLC installed a Merge Holdings capability in its system. This feature allows OCLC's quality control staff to delete records and transfer all holdings to a retained record. The OCLC system previously did not allow records to be deleted from the database until all holdings were removed and the procedures to ask libraries with holdings on records identified for deletion was a cumbersome paper one. The installation allowed OCLC staff to begin to process a large backlog of duplicate records. The records identified for deletion had come from reports from CONSER Participants. The effect of removal of the duplicates was an increase in searching efficiency and consolidation of holdings information for those libraries using OCLC records for interlibrary loan queries.

The operational changes, coupled with increased use of the CONSER database and its associated records, have been the hallmarks of CONSER's recent past and demonstrate the established role CONSER plays for bibliographic control of serials.

A2.2. HISTORY OF THE CONSER PROGRAM (1986-1993)

Evolution to Program Status

It became apparent to many in the CONSER Project by 1985--10 years after the Project began--that a formal review and strategic planning effort was in order. CONSER was originally conceived as a finite project to create a file of approximately 200,000 serial records but as early as 1979 the scope of the Project was changed to continue indefinitely. By 1985, the CONSER database included over 600,000 records; approximately 340,000 were project-authenticated. In 1985, the Library of Congress, in consultation with the National Library of Canada and the Online Computer Library Center, Inc., initiated a critical review of CONSER to address four major areas of concern:

- 1) The goals and objectives of the Project;
- 2) The tasks that must be performed if the goals and objectives were to be achieved;
- 3) Membership criteria, relating both to new and existing participants, and;
- 4) Management structure.

To further this review, LC contracted with Information Interchange Corp. in June 1985 to study the CONSER Project and prepare a set of recommendations on its future. The consultants conducted extensive interviews with 75 individuals in CONSER and the library community, solicited comments on CONSER from the information profession at large, and carried out a full literature search. The final report¹⁰ provided an exhaustive list of recommended actions and gave a suggested planning framework. A total of 103 recommendations were issued, including the structure of a proposed plan of action. A key element in the report was the proposal for a special planning meeting, and the Airlie House retreat in November 1986 culminated the year-long review process.

1986 was filled with several key meetings that transformed the Heynen-Blixrud report into action. Early in the year, the CONSER Participants and Advisory groups met and unanimously agreed on a

number of recommendations, including:

- 1) The need to continue CONSER as a major international cooperative bibliographic network;
- 2) The necessity for continued attention to quality control, training, and adequate documentation of policies and procedures;
- 3) The requirement to publicize new or emerging project activities, and;
- 4) A reaffirmation that all CONSER records are free of any copyright restrictions.

A Roles and Goals Committee met in the spring of 1986 and outlined numerous CONSER responsibilities:

- 1) To promote project objectives through liaison with national and international organizations, and advise on objectives and priorities with the aide of the CONSER Advisors (now, CONSER Councilors);
- 2) To develop, review, and approve long-term strategies, plans, and goals; and to initiate, review, and approve policy;
- 3) To develop and maintain a communications infrastructure for managerial and operational matters; and to provide administrative and systems support;
- 4) To continue coordinating CONSER-related projects (U.S. Newspaper Program (USNP), A&I Coverage Project, etc.);
- 5) To produce and distribute Program documentation (e.g., the *CONSER Editing Guide*), and other CONSER products (e.g., *CONSER Microfiche*); and to issue promotional material and articles, including the *CONSER* newsletter (now, *CONSERline*);

- 6) To input and upgrade records to CONSER standards and maintain record content and perform quality control;
- 7) To develop and administer a training program, and;
- 8) To continually review operational procedures.

In July of that year the CONSER Membership Committee met and dealt with major issues involving membership categories, criteria, and requirements, and outlined several options for non-OCLC CONSER members.

CONSER Airlie House Retreat -- November 1986

A three-day retreat was held in the fall of 1986 to follow-up on many of the major issues listed above and to make formal other changes that had been initiated by the review process. The objectives of the retreat were: to revitalize and refocus CONSER through developing a shared perception of the goals, objectives, structure, and operating procedures for the Project; to clarify the membership criteria, and; to develop an action plan, including responsibilities and schedules for the immediate tasks identified. The retreat sparked an energized refocusing within CONSER and led to decisive action on a wide array of issues.

The newly restructured Policy Committee changed the name of the organization from the **Conversion of Serials Project** to the **Cooperative Online Serials Program** (CONSER, the acronym, was retained). The name change reflected a new focus on cataloging current titles, database maintenance, and the ongoing nature of the Program.

A new mission statement was adopted,¹¹ along with five explicit goals with related objectives and tasks. This new structure--a practical framework for operating--became known as the CONSER Plan, the provisions of which were later included in the *CONSER Editing Guide (CEG)*. Reevaluation of the plan has been ongoing. It was restructured in 1993 and is reviewed and updated annually. The five goals state Program intent and provide direction, each with supporting objectives and specific tasks to help accomplish the goals. A number of task forces were set up following the 1986 retreat to support specific objectives in the Plan. The task force structure, as documented in the *CEG*, has been the main investigative tool for the Program. (By December 1987 seven task forces were operating in CONSER: Database maintenance and retrospective conversion, Format integration, Microtechnology, Macrotechnology, Multiple versions, Statistics, and Vernacular input.)

The first goal in the Plan centers on the database. Participants reaffirmed the principle that the CONSER record is a *bibliographic* record. The database was also envisioned to achieve comprehensiveness: to eventually encompass all time periods and international interests. The authentication process became the means for defining the status of the CONSER record, a process that assures accurate and unambiguous identification of the item cataloged. A commitment to record maintenance is also expressed in the Plan.

Membership is the second goal in the Plan.

"Issues pertaining to CONSER membership received much attention at the retreat, with a fitting first objective being the expansion of active membership in the CONSER Program. Participants approved four categories of membership (national, full, associate, and affiliate), each characterized by different requirements, including type and quantity of cataloging activity. New and continuing membership review procedures were adopted."¹²

Management of the Program was also restructured. An Executive Committee was established and the three existing groups were redefined into new Committees. The Policy Committee became the decision-making body for the Program, approving new members and setting broad-level policies. The Operations Committee became responsible for technical and operational matters, including training and documentation. The Advisory Committee was also established to draw from a wide range of national and international organizations. This group was later restructured to become the CONSER Councilors.

A regular meeting schedule for the Committees became established so that the Policy and Operations committees would meet at least once a year, while the Executive Committee was scheduled to meet several times between Policy Committee meetings to advance policy issues. OCLC committed resources to support the new meeting schedule. The office of the CONSER Coordinator, at LC, assumed the main coordinating and organizing functions for the various committees and task forces.

Goals four and five address standards and leadership. CONSER committed itself to support efforts to resolve USMARC format issues involving non-print serials and to contribute to the resolution of issues relating to multiple versions of serial publications. The Policy Committee proposed a new leadership role for the Program through continuing education efforts, and to provide more information to the library community, including the publication of a CONSER annual report.

Membership Developments

The principle elements were in place to allow for a significant expansion in CONSER membership after the 1986 retreat. A mechanism was established for inputting records for members not working in the OCLC database and new categories were established for associate and affiliate members with reduced requirements and levels of activity. LC devised a "Chronology for New Members" to help new participants and LC staff keep track of the steps involved in the membership and training process (published in the *CEG* in 1987). A survey was distributed to CONSER members in 1987 to provide a breakdown of each institution's collection interests and language coverage. This profile of CONSER members was devised to be a tool for the selection of new members.

The Center for Research Libraries (CRL) and the University of Georgia (UG) Libraries became the first new members of the CONSER *Program* in 1987. CRL was the first library to be admitted to CONSER since 1983 and the first to apply under the new membership guidelines. CRL's collection added a unique scholarly collection to the Program covering a wide range of languages and subjects. CRL had been an active NACO participant since October 1986 and an "enhance" library in OCLC. Their earlier involvement with the USNP introduced them to the CONSER Program.

UG Libraries at the time of membership ranked third in the U.S. for serials purchased and fourth in total expenditures for serials. Georgia has since pursued a special effort towards subject enhancement of serial records and has furthered the development of subject cataloging policies.

Just one year later, in 1988, three more members joined the Program: Massachusetts Institute of Technology (MIT), Chemical Abstracts Service (CAS), and EBSCO Publishing. MIT brought to

CONSER a collection strong in the sciences, engineering, and architecture.

The acceptance of CAS and EBSCO as affiliate members marked an important new chapter in CONSER's development. As a new category within the Program, the affiliate level allows members to use their special sources and expertise to contribute to the CONSER database by adding and maintaining fields covering publishing and A&I information. CAS adds CODEN and A&I notes to CONSER records, while EBSCO focuses on subscription price and address, frequency, and A&I coverage. CAS had worked closely with CONSER during the A&I Coverage Project and EBSCO had long used the CONSER database as a major source for its publication, *The Serials Directory: An International Reference Book*. The Faxon Co., a major international serial subscription service, joined CONSER in 1989, and in 1991 BIOSIS, the world's largest English language A&I service for the life sciences, also joined the Program.

Growth in the associate membership category has been primarily due to the success of the U.S. Newspaper Program. As the development of the state newspaper project took form in the 1980's, a steady stream of new members entered the fold. By the end of 1994 it is expected that all 50 states will have received funding in the USNP through the National Endowment for the Humanities. The effect on the CONSER database has been significant. Approximately 110,000 newspaper records resided in the database at the end of 1993, comprising 17% of the 650,000 CONSER-authenticated records. USNP also represents the largest union list group supported by CONSER, with over 350,000 holdings records (published in OCLC's *United States Newspaper Program National Union List*, fourth edition). Over 20 USNP state projects were actively cataloging in CONSER at the end of 1993.

Another addition to the associate category came at the end of 1993, with the membership of the American Theological Library Association (ATLA). ATLA includes 190 member libraries working in the field of religion. The Association first plans to focus on pre-1950 publications and will largely contribute records for preservation microforms.

By the early 1990's, CONSER recognized the need to establish guidelines for aiding flagging members, including a process leading to the dismissal of a Program member. "Improvement/ Conclusion of Membership" was published in the *CEG* in 1992. CONSER felt the new economic reality of the 1990's hit home as Yale University and the U.S. Department of the Interior left the Program in 1991. By 1993, two other members dropped out: Faxon Co. and Boston Theological Institute. In the same year, the New Serial Titles Section of LC's Serial Record Division was disbanded. The publication, *New Serial Titles*, which had previously included holdings symbols and contributions from CONSER and many non-CONSER libraries became limited to CONSER Program records.

Serials Cataloging Issues -- Record Maintenance

The CONSER mission statement issued after the 1986 retreat identified a new effort to maintain serial records. The newly formed CONSER Database Task Force met several times in 1987 and issued recommendations on record maintenance and retrospective conversion that were accepted by the Policy Committee later in the year. New maintenance procedures were applied for six months on a trial basis before being fully established. In 1988, publication of "Section B, Policies and Practices" in the *CEG* included a subsection on record maintenance to document these new procedures. This established record maintenance as a "process of ensuring the continued authoritativeness of a CONSER record through additions, changes, or deletions."¹³

The desire to make the record maintenance effort more efficient and timely led the Policy Committee to set up a new maintenance task force in 1992: Task Force on the Maintenance of CONSER Records by Non-CONSER Institutions. The charge was to investigate how non-CONSER OCLC members might contribute to the maintenance effort on the CONSER database. By the summer of 1993 two areas had been identified as meriting further investigation:

- 1) A subject and classification enrichment capability open to all OCLC members, and;
- 2) A title change/cessation mechanism involving a selected group of non-CONSER libraries.

Later in 1993, the University of California, San Diego, and the University of Kentucky agreed to participate in an experimental project to test the feasibility of a title change/cessation mechanism to help update CONSER records in OCLC. The project is expected to continue through 1994 with the addition of several more participants to gain a better understanding of how best to broaden the maintenance effort.

Serial Reproductions and Multiple Versions

A clear challenge to serials cataloging emerged in the mid-1980's as the proliferation of reproductions and bibliographic versions arrived on the library scene. In 1987, the CONSER Multiple Versions Task Force was formed and charged with considering the most effective means of representing different manifestations of the same work in online databases. In the same year, a Multiple Versions Committee was formed at the Library of Congress to address the issue. In 1988, the CONSER task force drafted a report on handling multiple versions in the cooperative environment and provided comments on a preliminary report of the LC Committee, *Communications of Records for Multiple Versions*.

The CONSER task force completed its report to the Policy Committee one year later, recommending two possible options for the treatment of serials issued in multiple physical formats. Later that year, a Multiple Versions Forum, organized by LC and funded by the Council on Library Resources, was held at Airlie House, Va. to focus on preservation microform masters and service copy versions of original print monographs and serials. A two-tiered structure was developed at the Forum involving a master record linked to holdings records for various versions. Due to systems limitations involving the two-tiered structure, CONSER determined that an interim approach was desirable that would include the linking of bibliographic records that constitute a multiple versions record set. The CONSER Executive Committee also expressed a desire to further explore the content of such records with the possibility that version records could include a minimal core of information.

New CONSER policies regarding the cataloging of reproduction microforms were completed and documented in the *CEG* in 1992. The new guidelines are closely coordinated with the ARL guidelines. Requirements for preservation microforms are specified for the recording of the span of issues reproduced, and in the procedures for linking records.

In 1993 the ALA CC:DA Task Force on Multiple Versions issued its recommendations, which included a three-tiered record structure--the bibliographic record for the original, the bibliographic information for the microform, and the holdings information. CONSER endorsed the CC:DA report, while recognizing that several issues were unresolved including the communication of subordinate bibliographic records (i.e., the records for the reproductions).

Subject Cataloging for Serials

The descriptive portion of CONSER records has traditionally received the most attention, although most records do include subject elements. In the fall of 1988, the Subject and Classification Task Force was established and charged with developing subject analysis in CONSER records. This group surveyed the extent of subject analysis and classification data available in CONSER records, the level of subject treatment, the thesauri and schedules used for subject treatment, and the effort employed to maintain subject and classification data. The Task Force also considered the desirability of expanding subject and classification data in the CONSER database and the extension of authentication to include subject and classification elements.

Work of the Task Force was completed in 1990 and the Policy Committee adopted several

recommendations including:

- 1) CONSER members should input LC classification numbers in field 050 using second indicator value "4" when the record lacks a class number or when an alternative class number is needed;
- 2) CONSER records should not reflect the authoritativeness of subject analysis data either at the record level or at the field level due to the volatile nature of subject data, and;
- 3) Changes should be made to the *CONSER Editing Guide* to reflect subject/classification policies relating to CONSER records.

Relevant pages of the *CEG* were revised and issued in the fall of 1991.

In November 1993, a Subject Seminar was held at the Library of Congress to further subject cataloging efforts in the Program. LC subject policy experts met with the CONSER Operations Committee to review a number of questions submitted by CONSER catalogers and their supervisors. Quality in subject cataloging and the necessary documentation to support quality subject analysis was also discussed.

In the spring of 1994 the Policy Committee endorsed a subject standard for CONSER that sets forth the requirements for different record levels, and the tools to be used for subject analysis. The new policy is expected to be finalized in coordination with the establishment of the CONSER core record.

A subject cataloging review was conducted at LC following the 1993 Seminar. Catalogers in the Regional and Cooperative Cataloging Division in LC reviewed a total of 600 CONSER records over a four-month period. LC's Serial Record Division monitored the review process and calculated a 90% field accuracy rate for subject elements in CONSER records. The main distinction between LC's and CONSER's subject analysis involves: choice of call number, the number of subject headings, and the number of subject subdivisions assigned.

Cataloging Simplification

The impetus to simplify cataloging emerged in the late 1980's and soon focused on revisions to the *Library of Congress Rule Interpretations*. Revisions to LCRIs involving serials are generally initiated through LC's Serial Record Division in consultation with the CONSER Operations Committee. Two important LCRIs involving serials were revised in 1987: 21.2A and 21.2C. These effectively reduced the number of serial title changes requiring new records. By increasing the number of situations involving a change in title that do not require a new catalog record, the need to recatalog serials described under earlier rules was also reduced. Cataloging information describing complex situations consequently became more intelligible to end users. The 1988 revised edition of AACR 2 later incorporated some of the LCRIs that simplified serials cataloging (e.g., 21.2A).

In 1990, LCRIs were revised to reduce some of the complexities of the catalog record, as well as unnecessary demands placed on catalogers. The concept of "cataloger's judgement" became incorporated explicitly into several LCRIs involving publisher information, thereby allowing catalogers to follow individual reasoning rather than strictly adhering to complex rules. Intricate bracketing conventions in serials cataloging were discarded with the broadening of permissible "sources of information" for serial records. Decisions involving series tracings were simplified, and the establishment of categories of "minor changes" for corporate body names, previously considered to be "variants," reduced authority work in many cases.

As the effort to simplify cataloging through the revision of the *LCRI* brought fewer results, the endeavor for a more efficient cataloging process was refocused in 1993. Following a combined meeting of the CONSER Policy Committee and the National Cooperative Cataloging Program, the Cooperative Cataloging Council (CCC) was established. The CCC was first convened in April 1993 to reinvigorate the National Cooperative Cataloging Program for monographic cataloging (later, the Program for Cooperative Cataloging). Seven task groups were created, including a Standards Task Group. In six-month's time, the CCC Standards Task Group developed a set of record requirements--the core record--that aimed to achieve more useful records. The monographic core record established a record level between minimal and full level cataloging designed for use in a cooperative environment. It was left to CONSER to develop the core record for serial publications.

The CONSER Core Elements Task Force, formed in November 1992, first examined existing national and international record requirements for serials: the *USMARC Format*, the *ISDS Manual*, the *OCLC Serials Format*, and the *CEG*. In 1993, the Operations Committee engaged in a wide ranging discussion of several questions relating to "core bibliographic elements" in serial records and endorsed

a review of CONSER bibliographic requirements, notification requirements, and authority procedures. As the CCC core record took form late in 1993, CONSER closely followed the developments of the CCC Standards Task Group and looked towards developing the core record for serials. Questions involving the number and types of CONSER record levels and the elements comprising the CONSER core record were left to be resolved in 1994.

Serials in Computer File Formats

Publishers began using computer file formats for serials by the mid-1980's and the processing of these materials immediately presented unusual problems for catalogers. Starting in 1991 the CONSER Operations Committee began discussing computer file serials on a regular basis as CONSER catalogers became more familiar with cataloging computer file serials. Early issues identified with computer files included: their serial nature, sources of information for records, hardware requirements, and related publications. In 1991, there were approximately 200 records for electronic serials (including online periodicals, floppy disks, and CD-ROMs); by early 1994, there were over 750 such records in the CONSER file.

CONSER has encouraged its members to contribute records for computer file formats in an effort to maintain bibliographic control of computer files issued serially. The first challenge involved difficulties in accessing the publications due to their hardware requirements. CD-ROM readers are hard to locate in many technical processing areas and, until the early 1990's, access to Bitnet and the Internet was not common in the typical cataloging environment. Catalogers often had to rely on print-outs from publications and their accompanying material to create records.

Floppy-disk serials were the earliest form of computer file serial generally available and have posed few problems relating to the accessibility of the information they contain. They usually have title screens and are typically published regularly as discrete titles. Of the "electronic" publications, CD-ROM serials have presented the most difficult cataloging issues. Because of their storage capacity, some CD-ROM serials contain numerous print publications that may vary from issue to issue. Others contain several years of an A&I publication or function as a version of an online database. The additional related titles or electronic versions often available can present difficult questions involving linking fields.

The remote access computer file serial (i.e., online serial) generally presented itself after the arrival of direct access computer files (e.g., floppy-disks and CD-ROMs). By the early 1990's, with greater access to Bitnet and the Internet, these electronic serials have become more familiar, presenting few major problems for catalogers. Description can be relatively straightforward, although mode of access, or file name and location, can be complex--and unstable. Additionally, some titles do have print versions. (Publication of the *CONSER Cataloging Manual* module on remote access computer file serials is not expected until after format integration.)

Computer files cataloging was the major topic at the 1993 Operations Committee Meeting, and with the publication of the *CONSER Cataloging Manual* module, "Direct Access Computer File Serials," in 1993, several issues were resolved. Module 30 covers sources of information for the record and variant titles for direct access files. Other areas of the record (e.g., 5XX notes) were presented more as interim solutions until the implementation of format integration. A number of fields for computer files that are new to serial catalogers are available with format integration. Policies on the application of these fields will continue to develop as their use becomes more familiar.

CONSER Database

The CONSER database is defined as,

"The set of serial records input/created or otherwise introduced to the OCLC database that are authenticated by CONSER Participants. Although some or all CONSER records reside in the local databases of CONSER institutions, maintenance is performed on CONSER records residing on OCLC, making that the authoritative set of CONSER records."¹⁴

In 1987, CONSER redefined the "CONSER record" to make record authentication the key identifying element. By the early-1980's, it became clear to many in CONSER that the centralized authentication process had become unwieldy. A new self-authenticating arrangement was established by 1984, but not before a large backlog of surrogates and records had accumulated at LC. As self-authentication became operational, the number of unauthenticated records in the CONSER database approached 200,000. Authentication was also redefined in 1987 to include: 1) the process of reviewing records for content to ensure conformance to CONSER practice and conventions, and; 2) the addition of elements to indicate the degree of authoritativeness of data in the record.

At the end of 1987, the CONSER database included over 390,000 records (authenticated records only). In June 1990, the half-million mark was broken and at the end of 1993, over 650,000 serial records resided in the database.

To support goal 1 in the CONSER plan--"The CONSER database shall be a *widely available* source of authoritative bibliographic information about serials"¹⁵ (italics supplied)--the CONSER file in OCLC is distributed to LC and the National Library of Canada for further distribution to the library community. In March 1991, LC culminated a three-year project to replace old batch-processing routines with more compatible and streamlined programs to convert and load OCLC tapes of CONSER records into LC's system. To coincide with the software installation, LC replaced its CONSER file by loading the complete OCLC CONSER database to create a new serials master file for LC. The new serials file was first distributed in April 1991 and included almost 17,000 records in addition to those that had been in the old CONSER file. In many cases, the new file also contained a more current version of the record.

While technical configurations other than dependence on OCLC were investigated and recommended as far back as the mid-1970's, the operational mode of activity has remained as it was at the beginning of CONSER--exclusively on OCLC. The practical arrangement originally devised for CONSER to operate on OCLC proved to be a more long-term solution for a variety of reasons. Implementation of the OCLC PRISM Service in 1991 showcased advances in the cataloging system, enhancing both searching and record inputting. Keyword searching introduced by OCLC in early 1993 further enhanced catalogers' search capabilities.

Planning began in 1980 to develop the Linked Systems Project (LSP). This became the principle hope for overcoming the limitations of the CONSER file being bound to a single database. LC, RLG, WLN, and OCLC worked to link dissimilar computer systems through common communications protocols. The overall goal was for the national database to rely on online communications for sharing and accessing records between a variety of databases. The LSP application became operational in 1987 when RLG members--including Yale University and the University of Michigan--began to contribute name authority records. In March 1988, Indiana University became the first OCLC member to input name headings using the LSP application; LC's Serial Record Division followed soon after. LSP currently operates as the means by which OCLC and RLG members contribute authority records to the LC/NACO authority file. Efforts to merge and coordinate the OCLC and RLG databases through the further development of LSP failed in 1991. CONSER had hoped to use LSP for the online input of serial records, particularly by non-OCLC members.

In 1992, the CONSER Policy Committee considered questions relating to a potential batchload process for loading serial records into OCLC as an alternative to LSP applications for bibliographic records. CONSER's Task Force on Batchload Contribution investigated new tools in 1993 (e.g., electronic file transfer and the use of the Internet), although difficulties involving multiple updates and duplication of

effort remained. Large scale interest in working on local systems spurred further developments in processing updates and contributions of serials records to accommodate batchloading into OCLC from local systems. Loading of newly created records through FTP was implemented in OCLC by mid-1994.

CJK Cataloging

One of the more specific developments of the CONSER database involves the inclusion of vernacular data in CONSER records for Chinese, Japanese, and Korean (CJK) language serials. The CONSER Vernacular Task Force was established in 1987 to study how vernacular data could be added to CONSER records. The key issues discussed by the Task Force included the input, maintenance, and distribution of CJK records.

By 1990, significant progress in documenting guidelines for the input of CJK records was reached as the Task Force reviewed a draft of *CEG* Appendix O, "Creating Records with Non-Roman Data for Chinese, Japanese, and Korean Serials." OCLC and the Library of Congress worked out the arrangements for the purchase of CJK terminals and the distribution of CJK records. In late 1991 LC began creating records with variable fields in Chinese. Four additional CONSER members were prepared to start inputting CJK records by early 1992: Center for Research Libraries, Indiana University, University of Pittsburgh, and the University of Washington.

Roman-only versions of the CJK records are still distributed in LC's monthly *MARC Distribution Service--Serials* and in *MDS--Complete*. LC's Cataloging Distribution Service began distribution of the full CJK versions in *MDS--Serials CJK*, starting in 1992.

The application of CJK cataloging in CONSER institutions proved challenging in a number of areas. A lengthy training and review process was necessary to ensure accurate application of the new guidelines. OCLC assisted with training and the Library of Congress helped to review early CJK records of CONSER members. Extra efforts were often required to enable the vernacular data to migrate into local systems after their input into OCLC. The maintenance of these records to ensure that the current version resides in the local system can also be a challenge. The need for vernacular authority records has also been recognized since the romanization of CJK characters can be interpreted differently.¹⁶

Program Documentation

Task 2.3 in the CONSER plan, "Provide timely and high quality documentation related to serials," is found under the second goal: "The CONSER Program shall support and promulgate standards and establish necessary standardized practices for the bibliographic control of serials."¹⁷ The *CONSER Editing Guide*, first published in 1986 with updates twice yearly, serves as the documentation backbone for the Program. The *CEG* is oriented to the CONSER Program with an OCLC slant and describes common approaches and agreed-upon practices of its members. It is used within the Program and also by the wider serials cataloging community.

Each of the two parts of the *CEG* replaced a single document. Part I superseded the unpublished *CONSER Manual* and updated and expanded on the policies and procedures that served during CONSER's early years. Part II, the technical guidelines, replaced the *MARC Serials Editing Guide*, second CONSER edition. The publication of *AACR 2* made much of the earlier documentation obsolete. New documentation was also needed to record policies and practices related to CONSER members' ability to authenticate their records and modify existing LC-authenticated records.

Section A of Part I was first issued in 1987 as updates to the base text and provided general information about the Program. Section B was issued as an update in 1988 to document policies and standardized practices. Section C contains procedures relating to modifying, deleting, and consolidating records; it

also identifies special types of CONSER records. Part II was designed "to provide a comprehensive guide for the content designation and input of serial records with clear instructions for complex, as well as routine situations, and to define CONSER usage of USMARC data elements as they apply to current AACR 2 serials cataloging."¹⁸ This field-by-field guide has become a widely praised tool for all serials catalogers.

Early in 1994, CONSER announced that no more updates would be issued for the current edition of the *CEG*, with the intention of reissuing the publication with format integration-related changes. The revised 1994 edition includes variable fields for non-print serials previously not available in the USMARC serials format. The new edition will continue its focus on the input/update of serial records. A complete revision of the fixed field portion of the *CEG* will be issued as an update to the new edition, to coordinate with the full implementation of format integration.

The *CONSER Cataloging Manual (CCM)* was published in June 1993 as a companion to the *CONSER Editing Guide*. Part I, "Original Cataloging," consists of 18 modules, and was designed to be a training tool for new catalogers and a useful reference for experienced serials catalogers. The first update was issued late in 1993. "Interpreting Pre-AACR 2 Serial Cataloging Records" was the first module issued for Part II, "Adapting Records;" and "Direct Access Computer File Serials" was the first issued for Part III, "Special Types of Serials and Special Problems." Several additional modules for Parts II and III were in the planning stages by early-1994.

The *Newspaper Cataloging and Union Listing Manual* was issued in 1990 and replaced the *Newspaper Cataloging Manual*, CONSER/USNP Edition (1984). The 1990 *Newspaper Manual* is a training manual and reference source for catalogers in the U.S. Newspaper Program. The first section is an "Editing Guide" for newspaper catalogers--a ready reference to fields, indicators, subfields, etc. The "Union Listing" section describes USNP's use of the OCLC Union List Subsystem.

Conclusion

The evolution of CONSER to program status in 1986 and its developments during the year-long review process set the stage for CONSER's growth and achievements in the following years. Its governance structure and management plan served as the foundation for the growth in membership and the resolution of numerous serials cataloging issues. A practical approach in dealing with these cataloging challenges could be successfully implemented by Program catalogers throughout North America only with solid documentation of CONSER policies and practice and strong support from its members. Growth of the CONSER database was substantial over the last eight years (1986-1993), not only because of the hundreds of thousands of serial records added by Program catalogers, but also due to the successful development of policies relating to the issues of the day: multiple versions, cataloging simplification, computer files, and many others.

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